UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/686,628 | 10/12/2000 | Paul J. Hinker | 06502.0302-00 | 6118 |

22852 7590 01/30/2006

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

| EXAMINER | |
|---|---|
| VO, TED T | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2191 | |

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/686,628 | HINKER, PAUL J. | |
| | Examiner | Art Unit | |
| | Ted T. Vo | 2191 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/12/00* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

**DETAILED ACTION**

1. This action is in response to the amendment filed on 10/28/2005.

Claims 1-16 are pending in the application.

***Response to Arguments***

2. Applicant's arguments in the remarks filed on 10/28/2005 have been fully considered. Response to Applicants' changeling the satisfaction of "a prior art" such as of Coutant and "Microsoft Document.

Hewlett Packard and MSDN Library, and their online libraries had shown steady efforts for developments of 32 bit/64 bit conversions before the filing of this application. See MSDN online library and HP website.

A claim in which its functionality is broadly displayed and/or is merely a statement such as "converting a 32 bit and 63 bit" would not be a novelty subject matter. It should be noted that Hewlett Packard and Microsoft had circulated and discussed the "conversion of 32-bit and 64-bit" long time before the filing date of this application. The submitted prior arts are typical examples/evidences. The Coutants' discussion, the **source from Hewlett Packard**, dated on 3/17/2000, and Microsoft last posted in 1999 in **MSDN online library** are sufficient proofs.

As mentioned, the Applicants' claims are broad and lacking of main steps. Such Claims could make no distinctions from the publicly preempted concepts or ideas, i.e. a clause such as "16-bit/32-bit" or "32-bit/64-bit" would read the claims. In fact, converting a 32 bit to 64 bit, or with the latter technology, data migration from $2^n$ -bit to $2^{n+1}$-bit, is only a preemption of converting 8-bit to 16-bit or 16-bit to 32-bit for updating with its current technology.

As referred to and seen in MPEP: Prior art disclosures on the Internet or on an on-line

database are considered to be publicly available as of the date the item was publicly posted (MPEO 2128: Printed Publication as Prior Art).

If the publication does not include a publication date (or retrieval date), it cannot be relied upon as prior art under 35 U.S.C. 102(a) or (b), although it may be relied upon to provide evidence regarding the state of the art.

A publicly displayed document where persons of ordinary skill in the art could see it and are not precluded from copying it can constitute a "printed publication," even if it is not disseminated by the distribution of reproductions or copies and/or indexed in a library or database. As stated in In re Klopfenstein, 380 F.3d 1345, 1348, 72 USPQ2d 1117, 1119 (Fed. Cir. 2004), "the key inquiry is whether or not a reference has been made publicly accessible.'" Prior to the critical date, a fourteen-slide presentation disclosing the invention was printed and pasted onto poster boards. The printed slide presentation was displayed with no confidentiality restrictions for approximately three cumulative days at two different industry events. 380 F.3d at 1347, 72 USPQ2d at 1118. The court noted that "an entirely oral presentation that includes neither slides nor copies of the presentation is without question not a printed publication' for the purposes of 35 U.S.C. § 102(b). Furthermore, a presentation that includes a transient display of slides is likewise not necessarily a printed publication.'" 380 F.3d at 1349 n.4, 72 USPQ2d at 1122 n.4. In resolving whether or not a temporarily displayed reference that was neither distributed nor indexed was nonetheless made sufficiently publicly accessible to count as a "printed publication" under 35 U.S.C. 102(b), the court considered the following factors: "the length of time the display was exhibited, the expertise of the target audience, the existence (or lack thereof) of reasonable expectations that the material displayed would not be copied, and the simplicity or ease with which the material displayed could have been copied." 380 F.3d at 1350, 72 USPQ2d at 1120. Upon reviewing the above factors, the court concluded that the display "was sufficiently publicly accessible to count as a printed publication.'" 380 F.3d at 1352, 72 USPQ2d at 1121.<

With regards to Applicants arguments to Prior Arts' rejections, Applicants' arguments fail to comply with **1.111(c) and/or MPEP 714.04,** where Applicants fails to discuss and/or to point out the patentability in the Claims. Applicants' arguments simply only traverse the rejections. Such Arguments are not persuasive.

Furthermore, some of Applicants' amendment necessitated a new ground of rejection presenting in this action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The arguments to the amended claims are moot in view of the new ground of rejection.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
Claims 1-4: With regards to newly added limitation of Claims 1-4, particularly added in Claim 1,
*adding to the interface file a directionality of at least one of the integer parameter and the logical parameter based on comments in the source code;*
*adding to the interface file a parameter size along each dimension of at least one of the integer parameter and the logical parameter;* Examiner is unable to identify the teaching in the specification. Applicants' corporation for identifying the claimed features in the specification would be respectfully required.
The above limitations for being insufficient antecedent basic in the specification render the Claims 1-4 indefinite.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Coutant, "64-Bit Application Development for PA-RISC & IA-64", 3-2000.

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 1: Coutant discloses,

*A method in a data processing system containing source code with a subprogram having at least one of an integer non-scalar parameter and a logical non-scalar parameter, the method comprising:*

*creating an interface file for the subprogram in the source code; storing in the interface file a definition of the subprogram;* (See 64-bit programming model in p. 3-4)

*adding to the interface file a directionality of at least one of the integer parameter* (e.g. the type/declaration required by programming syntax such as "int") *and the logical parameter* (e.g. the type/declaration required by programming syntax such as "long") *based on comments* (a table shown in p. 3 has means of comment) *in the source code; adding to the interface file a parameter size along each dimension* (referred to 32-bit or 64-bit) *of at least one of the integer parameter and the logical parameter* (See 64-bit programming model in p. 3-4; See p. 11, 'linkage table', and see p.14, it shows a conversion that checks the types when mapped from 33-bit code to 64-bit code);

*and reading the interface file to generate a stub routine that converts at least one of the integer and logical parameters from 32-bit to 64-bit and that invokes the subprogram by specifying the converted parameters* (See p.5-6).

As per Claim 2: Coutant discloses, *The method of claim 1, wherein the source code is 32-bit code and wherein the method further includes the step of invoking the 64-bit code from 32-bit code* (See p.5-6).

As per Claim 3: Coutant discloses, *A method in a data processing system, comprising the steps of:*

*receiving 32-bit source code; and*

*automatically generating a 32-bit to 64-bit conversion stub that is used by the 32-bit source code to invoke 64 bit code* (See p.5-6).

As per Claim 4: Coutant discloses,

*The method of claim 3, wherein the 32-bit source code has a subprogram with an integer or logical parameter and wherein the automatically generating step further includes the steps of:*

*creating an interface for the subprogram;*

*inserting a code-generator statement into the interface describing a characteristic of the parameter; and*

*using the interface to create a stub for use as a 32-bit to 64-bit converter.*

(See p. 3-4 and p.5-6).

As per Claim 5: Coutant discloses,

*A data processing system, comprising:*

*a storage device, comprising:*

*source code with a subprogram having at least one of an integer and logical parameter;*

*an interface generator that reads the subprogram and that generates an interface file with indications of characteristics of the parameter; and*

*a stub generator that reads the interface file and that generates a stub for the subprogram by using the characteristics* (p. 3-4, where the 'type' is identified as characteristics for the developing of 32-bit code and 64-bit code in conversing/porting), *wherein each of the stubs receives a set of parameter values* (p. 3-4: i.e., expression in ILP32), *generates the values for the required parameters from the received set of parameter values, and invokes the subprogram with the values for the parameters; and*

*a processor for running the interface generator and the stub generator* (Whole claim is referred to p. 3-4 and p.5-6, as addressed in Claim 1 because Claim 5 is the system, typically a computer, that performs the step of Claim 1).

As per Claim 6: Coutant discloses,

*The data processing system of claim 5, wherein the source code contains comments indicating the characteristics of the parameter* (comments are part of instructions/code used in major programming languages).

As per Claim 7: Coutant discloses,

*The data processing system of claim 6, wherein the characteristics include an indication of a conditional value for at least one of the required parameters* (It should be noted that *conditional value for at least one of the required parameters* is mere instruction/code used in major programming languages. Further see p. 3-4, refer to 'type' and see the 'stub' and using programming instructions).

As per Claim 8: Coutant discloses, *The data processing system of claim 6, wherein the characteristics include an indication of whether at least one of the required parameters is used to contain a return value.* (It should be noted that *an indication of whether at least one of the required parameters is used to contain a return value* is mere syntax of instruction/code used in major programming languages. Further see p. 3-4, refer to 'type' and see the 'stub' and using programming instructions).

As per Claim 9: Coutant discloses, *The data processing system of claim 6, wherein the characteristics include a directionality of at least one of the required parameters* (It should be noted that *a directionality of at least one of the required parameters* is mere syntax of instruction/code used in major programming languages. Further see p. 3-4, refer to 'type' and see the 'stub' and using programming instructions)

As per Claim 10: Coutant discloses, *The data processing system of claim 6, wherein the characteristics include an indication of whether at least one of the required parameters required a multidimensional variable* (It should be noted that *an indication of whether at least one of the required parameters required a multidimensional variable* is mere syntax of instruction/code used in major programming languages. Further see p. 3-4, refer to 'type' and see the 'stub' and using programming instructions; i.e. array etc.)

As per Claim 11: Coutant discloses, *The data processing system of claim 6, wherein the characteristics include an indication of whether a size of at least one of the required parameters is based on another one of the required parameters* (It should be noted that *an indication of whether a size of at least one of the required parameters is based on another one of the required parameters* is mere syntax of

instruction/code used in major programming languages. Further see p. 3-4, refer to 'type' and see the 'stub' and using programming instructions).

As per Claim 12: Coutant discloses, *The data processing system of claim 6, wherein the characteristics include an indication of whether at least one of the required parameters is a work space parameter* (It should be noted that *an indication of whether at least one of the required parameters is a work space parameter* is mere syntax of instruction/code used in major programming languages. Further see p. 3-4, refer to 'type' and see the 'stub' and using programming instructions).

As per Claim 13: Coutant discloses, *A computer-readable medium containing instructions for controlling a data processing system to perform a method comprising the steps of:*

*receiving 32-bit source code; and*

*automatically generating a 32-bit interface to the 64-bit source code* (See p. 5-6).

As per Claim 14: Coutant discloses, *The computer-readable medium of claim 13, wherein the 32-bit source code has a subprogram with a parameter and wherein the automatically generating step further includes the steps of:*

*creating an interface for the subprogram;*

*inserting a code-generator statement into the interface describing a characteristic the parameter; and*

*using the interface to create a stub for use as the 64-bit interface.*

(See p.3-4, *interface for the subprogram;* See p.5-6, *create a stub for use as the 64-bit interface*).

As per Claim 15: Coutant discloses, *A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having source code with a subprogram having a parameter, the method comprising the steps of:*

*reading the source code; and*

*generating a stub routine that invokes the subprogram and that facilitates use of at least one of a converted integer and logical parameter.* (See p. 5-6).

As per Claim 16: Coutant discloses, *A data processing system comprising:*

*means for receiving 32-bit source code; and*

*means for automatically generating a 32-bit to 64-bit stub to the 32-bit source code.* (See p.3-4, and p. 5-6).

7. Claims 1-4, 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft, "Microsoft Interface Definition Language (MIDL): 64-Bit Porting Guide" 8-1999.

Given the broadest reasonable interpretation of followed claims in light of the specification.

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 1: Microsoft discloses,

*A method in a data processing system containing source code with a subprogram having at least one of an integer non-scalar parameter and a logical non-scalar parameter, the method comprising:*

*creating an interface file for the subprogram in the source code; storing in the interface file a definition of the subprogram;* (See p.1, Microsoft using MIDL as a programming language for conversing 32-bit to 64-bit).

*adding to the interface file a directionality of at least one of the integer parameter and the logical parameter based on comments in the source code;*

*adding to the interface file a parameter size along each dimension of at least one of the integer parameter and the logical parameter;* (See whole reference, particularly referring on the syntax of subroutine calls and Handle Types of MIDL. For example an IDL setup which used in the interface definition (p.12) shows adding parameter lists);

*and reading the interface file to generate a stub routine that converts at least one of the integer and logical parameters from 32-bit to 64-bit and that invokes the subprogram by specifying the converted parameters* (See p.15, when a compiler reading interface definition file written under MIDL, it calls a 64-bit stub generation, for example, "As of Summer 1999, (i.e. Windows 2000 Pro RCx releases), the 64b type libraries are supported by mapping 32b*.TLB files...").

As per Claim 2: Microsoft discloses, *The method of claim 1, wherein the source code is 32-bit code and wherein the method further includes the step of invoking the 64-bit code from 32-bit code* (See whole reference, referring to terms "32-bit", "64-bit").

As per Claim 3: Microsoft discloses, *A method in a data processing system, comprising the steps of:*

*receiving 32-bit source code; and*

*automatically generating a 32-bit to 64-bit conversion stub that is used by the 32-bit source code to invoke 64 bit code* (See whole reference, referring to terms "32-bit", "64-bit").

As per Claim 4: Microsoft discloses,

*The method of claim 3, wherein the 32-bit source code has a subprogram with an integer or logical parameter and wherein the automatically generating step further includes the steps of:*

*creating an interface for the subprogram;*

*inserting a code-generator statement into the interface describing a characteristic of the parameter; and*

*using the interface to create a stub for use as a 32-bit to 64-bit converter.*

(See p. 3-4 and p.5-6).

As per Claim 13: Microsoft discloses, Microsoft discloses an interface definition that performs porting 32-bit into 64-bit that covers the limitation:

*A computer-readable medium containing instructions for controlling a data processing system to perform a method comprising the steps of:*

*receiving 32-bit source code; and*

*automatically generating a 32-bit interface to the 64-bit source code.*

Microsoft discloses the conversion of 32-bit source code, used in generating 32-bit Windows application, to 64-bit Windows (See Summary in p. 1: This summary clearly address more than the claimed limitation above).

As per Claims 14-16:

The functionality of each of independent Claims 14-16 corresponds to functionality of Claim 13. Claims 14-16 have the same rejection as set forth in Claims 13 in regard to the teaching of Microsoft.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted T. Vo
Primary Examiner
Art Unit 2191
January 20, 2006